

## **AMENDMENTS TO THE SPECIFICATION**

Please amend the ABSTRACT as follows:

A pressure wave apparatus utilizing constant volume combustor device includes the principles of pulsed detonation and wave rotor detonative combustion technologies. In one form the wave rotor of the constant volume combustor is supported by magnetic bearings. The apparatus includes inlet and outlet ports that interface with a plurality of fluid flow passageways on a rotor. A buffer gas is routed through some of the inlet and outlet ports and into and out of the plurality of fluid flow passageways. One of the inlet ports is a buffer gas inlet port that when placed in registry with a fluid flow passageway allows the flow of buffer gas into the respective passageway. Fuel is delivered into the buffer gas proximate the buffer gas inlet port so that only a portion of the buffer gas inlet port receives any fuel.